HISTORY OF THE HUMAN SCIENCES Vol. 23 No. 2

pp. 86–108
[23:2; 86–108; DOI: 10.1177/0952695110361834]
http://hhs.sagepub.com

Origins and canons: medicine and the history of sociology

FRAN COLLYER

ABSTRACT

Differing accounts are conventionally given of the origins of medical sociology and its parent discipline of sociology. These distinct 'histories' are justified on the basis that the sociological founders were uninterested in medicine, mortality and disease. This article challenges these 'constructions' of the past, proposing the theorization of health not as a 'late development of sociology' but an integral part of its formation. Drawing on a selection of key sociological texts, it is argued that evidence of the founders' sustained interest in the infirmities of the individual, of mortality, and in medicine, have been expunged from the historical record through processes of 'canonization' and 'medicalization'.

Key words founders of sociology, history, medicalization, medical sociology, sociology

INTRODUCTION: ON WRITING THE 'HISTORY' OF SOCIOLOGY

Sociological textbooks and other 'official histories' conventionally recount *mainstream sociology* as a body of knowledge first named in the early decades of the 19th century, and developing between 1890 and 1920 as a discipline and profession with its own associations and journals (cf. Turner, 1996: 22). Sociology's intellectual origins are said to have arisen from the turmoil of

the Industrial Revolution (Robertson, 1987: 14; Gallagher *et al*., 2000: 391; Wardell and Turner, 1986: 12; Alexander, 1997: v), and the French Revolution (Nisbet, 1967; Naegele, 1965a: 25). In contrast, *medical sociology* is regarded as a 'late' subdisciplinary development of mid-20th-century America, with intellectual roots in the 19th-century social surveys and social medicine in England, France and Germany (cf. Bloom, 2002; Scambler, 1987: 1; Claus, 1983: 1592; Albrecht, 1979: 2–3; Figlio, 1987: 77). These conventional 'histories' rarely deviate from the view that the sociological 'founders' neglected issues of health and illness (cf. Gerhardt, 1989; Cockerham, 2005: 11; Cockerham, 1983: 1514; Jefferys, 2001: 16; Williams, 2003: 133), did not systematically theorize the body (e.g. Shilling, 1993; Turner, 1991), and only discussed health and illness as a means to demonstrate how 'core' concepts and theoretical frameworks (such as class, stratification, bureaucracy, or social integration) can be *applied* to practical or contemporary problems (e.g. Grbich, 2004; Quah, 2005: 24; Idler, 2001: 171–2; Germov, 2005; Susser and Watson, 1971; Mechanic, 1978: 326). The 'official' view of the discipline, then, is that the theorizing of medicine and ill-health began with Parsons in the 1950s (Idler, 1979: 723; Cockerham, 2005: 5; Turner, 1987: 6–7; Orfali, 2005: 264, 278–9; Armstrong, 2000: 5, 25), and as a relatively 'late' development produced as a 'hybrid' and derivation of *20th-century* medicine, public health and sociology (cf. Bloom, 2002: 37; D. Porter, 1997; Petersdorf and Feinstein, 1980: 27; Badgley and Bloom, 1973; Reader and Goss, 1959). Early sociology is thus characterized as largely devoid of human reflection on the experience of life, death, healing, or bodily health. The rare exception to this conventional view, and essentially ignored in the official history of the discipline, is given by Michel Foucault (1980: 151), who argues the history of sociology is to be found not in Montesquieu or Comte, but in the practice of clinical medicine in 18th-century France.

This conventional view of sociology's past belongs to a genre of 'histories' that seek to demonstrate the integrity of a discipline through a showcase of past individuals and 'discoveries'. They have a long tradition in western scholarship, but became increasingly unpopular with the rise of the new *social history* movement of the 1950s–1970s and later the *new historicism* (cf. Conrad, 2004; Seidman, 1985; Zagorin, 1999). Despite protestations that historiography has since become more reflective and critical, and now places greater emphasis on the social context (e.g. Patterson, 1998: 6; J. Warner, 1995: 174), this 'outmoded' form of history remains pervasive in 'histories' of sociology. Moreover, history is no longer highly valued within sociology, for while there are exceptions (e.g. Collins, 1985; Eisenstadt and Curelaru, 1976), discussion of sociology's past *context* tends to be limited to accounts in the opening pages of an introductory textbook or exegesis of classical theory, or, alternatively, offered only as a series of *local* histories outlining the formation of a particular sociology department, association or society and its significant appointments (e.g. Camic, 1995; Germov and McGee,

2005; Bulmer, 1997; Goldman, 1986). It is thus perhaps timely to see the emergence of a new challenge to the genre, this time focusing around the notions of 'origin myths' and a disciplinary 'canon'.

Within this growing literature, sociology's 'official history' has been called into question as a 'foundational myth' or 'construction', and efforts are directed at revising 'misleading' accounts of the discipline's history, often through the inclusion of 'lost' scholars (e.g. McDonald, 1994; Eichler, 2001; Langer, 1992; Gerhardt, 1989; Platt, 1983; Wright, 2002; Stafford, 1994; McLaughlin, 1999). Somewhat more contentiously, some seek to correct the historical record through a closer examination of the social context of the founders and the way it fashioned their concerns and thus the development of the discipline (e.g. Connell, 2005, 1997; Connell and Wood, 2002; Holton, 1996; Langer, 1992; Wallerstein, 1999). For example, Jennifer Platt (1985) takes issue with the view of Max Weber as a founder of qualitative sociology. Her work shows that Weber did not become influential in the USA until the 1940s, in part because of the late translation of his work, but also as a consequence of parochialism where American scholars more readily accepted 'home-grown' theorists such as Dewey, Mead and Cooley (Platt, 1985: 455–7). A rather different approach is taken by Robert Holton and Raewyn Connell, who both challenge the conventional view of the origin of the discipline as a response to political and economic revolution and the problems of industrialization. Holton (1996: 25–6) proposes sociology as emerging in a more immediate engagement with contemporary intellectual discourses such as economics and psychology; while Connell (1997) argues that an artificial 'history' has been produced through a process of 'canonization' which secured disciplinary legitimation and enhanced the processes of professionalization. For Connell (1997: 1516, 1521, 1545), a closer reading of the past indicates that the founders were more concerned with global difference than with industrialization, and the key problems of the early discipline were not class and alienation but ethnicity, race, gender and sexuality.

These critiques raise the possibility that matters concerning health, mortality and disease may have been similarly subjected to the processes of canonization and expunged from sociology's official record. The first part of this article investigates this possibility, re-examining several 'core' sociological texts to reveal a greater level of interest by the disciplinary founders than is generally acknowledged. In the second half of the article, the question of why these early preoccupations have been given insufficient attention is addressed through an examination of the mid-20th-century 'sociological project'. It is argued that this professional and intellectual project – which transformed sociology, its 'core concerns' and sociologists' knowledge of their past – underestimated the founders' concerns with health, disease and mortality at least partly as a consequence of medicalization. In other words, the official history of the discipline is a reflection of the historical and social location of

the 'canon-makers', the institutional power of medicine, and prevailing discourses of health, disease and mortality.

This is not the first article to call for a revision of the conventional history of sociology, for many have argued for greater critical reflection on sociology's origins, more care in making claims about our institutional and intellectual past (e.g. McDonald, 1994; Camic and Gross, 1998), and caution against treating history as merely a convenient means to explain what sociology *is* (Szacki, 1982: 361). This article, though, has rather modest aims. It does not claim to replace other arguments about the inaccuracies of the historical record, but seeks to reveal an additional dimension of the process: the extent to which the construction of the disciplinary canon was influenced by 20th-century biomedicine.

THEORIZING ILL-HEALTH BETWEEN 1800 AND 1920

Given that it is clearly beyond the scope of a journal article to offer a comprehensive analysis of all sociological texts over a 100-year period, this section instead highlights previously underexamined aspects of otherwise well-known works to challenge the canonical assertion of a 'disinterest' in theorizing health, disease and mortality prior to the 20th century. The thesis is developed through a brief reanalysis of some of the texts of sociologists Claude-Henri de Saint-Simon, John Stuart Mill, Karl Marx, Frederich Engels, Max Weber and Émile Durkheim.

The texts of these scholars were produced in a 19th-century, socio-cultural context in which there was relatively greater *public* discussion about the nature and causes of ill-health, and, within intellectual circles, a plethora of theories of disease, health and early mortality. Conventional accounts of the history of medicine (i.e. histories closely associated with the modern discipline of medicine) generally assume the formation of a coherent body of medical knowledge held by an elite, professionalized and organized group of practitioners from the middle of the 19th century (e.g. Hardy, 2001: 23, 30; Sand, 1952: 54–5,169; R. Porter, 1993: 50–1). In contrast, however, more critical, historical analyses have indicated a century characterized by widespread disorder and uncertainty within both 'medical' practice and its knowledge base (Lawrence, 1994; Sturdy and Cooter, 1998; Schepers, 1985: 336; Bullough and Bullough, 1972: 97–8). According to these latter accounts, no particular theories of disease were favoured by the majority of healers, nor by elite, city-based, university-trained practitioners (cf. Marks, 2006; Lawrence, 1985). Thus, in stark contrast to the 20th century, there was no single 'medical' paradigm against which the early sociologists might direct their critique. Instead, sociologists gave their attention to the various theories and perspectives of healing and disease, including those persisting from the previous

century, such as vitalism, mechanism and galenism (cf. Weber, 1949[1922]: 75; Durkheim, 1951[1897]: 104, 108, 110; 1938[1895]: 22), early 19th-century theories including miasma, 'filth' and contagionism (Engels, 1969[1845]: 24, 127, 134; Marx and Engels, 1976[1845–6]: 490, 502; Saint-Simon, 1975[variously 1812–23]: 203, 272–3), early to mid-century theories and practices such as pathological anatomy (Durkheim, 1951: 365; 1938: 49–51, 56–8, 74), and the 'new physiology' as it became increasingly popular in the closing decades of the 19th century (Marx and Engels, 1976: 46, 493, 502, 507, 541, 561; Durkheim, 1951: 114; 1960[1900]: 367; 1938: 59–63; Weber, 1949: 85–6; 1970 [1922]: 142–4). Moreover, sociologists were active participants in debates about the nature and cause of disease, because, along with the plethora of healing paradigms, the therapeutic sector was essentially disorganized, with minimal control by the elite over the far greater majority of 'irregular' healers, and composed of many 'sects' rather than distinct groups with common aims (Lawrence, 1994: 77–8). In this context of multiple claims to knowledge about ill-health, and without a dominant medical profession, sociologists, with no readily identifiable 'medical' protagonist, legitimately participated – as public intellectuals – in the many public debates. Indeed the historical record indicates that sociologists took part in debates about the relationship between poverty and disease, contested the concept of a 'germ', pronounced upon the appropriate role of the state in matters of public health, and theorized whether disease might be a social and moral phenomenon or – as some were increasingly insisting – a universal, physiological, biological entity subject to scientific analysis.

Sociological contributions to these debates cannot, as in the later 20th century, be characterized as offering an *alternative* to a 'medical' model of disease, for such polarization had not yet emerged. Nevertheless sociologists, along with various social reformers and some healer-practitioners, contributed to these discourses in two fundamental ways. First, sociology raised a set of propositions in opposition to class-based and (some) elite perspectives on health, disease and mortality. While there was no decisive alignment between elite groups and specific theories of disease, liberals and conservatives tended to consider disease a consequence of society 'relapsing' into 'savagery' through the 'inadequacies, immorality, and idleness' of the proletariat itself (Marx and Engels, 1976: 490). This view was regularly expressed in the newspapers and writings of the period, and publicly voiced in 1865 by Armand-Joseph Meyenne, a Belgian army doctor, who saw the cause of disease in 'evil-living' (cf. Sand, 1952: 206). Shifting the focus away from the individual, 19th-century sociologists constructed structural explanations for ill-health. While they agreed with the view of an *association* between poverty and disease, they suggested that starvation, disability, alcoholism, homelessness, poverty and early death are *social*, not individual, phenomena (Engels, 1969: 59). Moreover, although evolutionary theory had made its appearance

by mid-century, and social Darwinism was increasingly popular, Marx and Engels also argued against the view espoused by public figures such as Malthus, of poverty as merely the consequence of the operation of 'natural laws'. Hence, while Marx and Engels (1976: 44, 507) ascribed to the evolutionary notion of largely irresistible, underlying social forces shaping social relations and historical change, they nevertheless insisted on the possibility of revolutionary change based on the historical contingency of human consciousness. Thus for Marx and Engels, unlike Malthus, but like Darwin, human progress was possible through adaptation and improvement (Manier, 1980: 8). As a consequence, Marx and Engels proposed a theoretical framework in which both poverty and disease would be eliminated through human action to alter the structural conditions determining the relationship between humans and their environment. In this framework, capitalism was the causal force which produced the moral and physical degradation of the working class (Marx, 1964[1844]: 114; Engels, 1969: 129).

Sociologists, and others, lobbied for radical social change and/or state intervention to clean up the environment, improve drainage (Saint-Simon, 1975: 203, 272–3; Engels, 1969: 24, 127, 134), provide financial relief for the sick and employment programmes for the poor (Saint-Simon, 1975: 214, 240–3), improve medical ethics (Weber, 1970: 142–4; 1949: 85–6), eliminate iatrogenic medicine (Mill, 1962[1859]: 229, 233–4; Engels, 1969: 24, 127, 134), reform medical education, increase access to health services and centralize these under state control (Saint-Simon, 1975: 194–7, 204, 277). Even John Stuart Mill, known for his Utilitarian proposition that individuality and freedom are obtainable only if unfettered by state intervention (Mill, 1962: 192–3, 197), modified his principles in the face of human affliction (ibid.: 210–22, 263), and argued the state must sometimes interfere in human liberties in order to prevent harm or promote the public good (ibid.: 184, 205, 209–13, 242). For Mill (ibid.: 229), this meant a role for the state in warning of the dangers of poisons and the incautious use of substances (such as opium or alcohol). However, it also meant, somewhat more controversially, the formulation of laws restricting the sale or use of potentially harmful products and the regulation of service transactions to constrain the power of one individual over another (ibid.: 233–4, 238).

Secondly, sociologists contributed to discourses about health and healing through offering an alternative to the reductionism and positivism of the early naturalists, statisticians, biologists and proponents of the experimental, laboratory sciences (Collyer, 2008). 'Medicine', still in a process of institutional formation, was unable to offer a clear position in this debate. Individual healer-practitioners instead continued to draw on a fragmented array of older philosophies – particularly galenism – and generally resisted the experimental sciences, considering medicine an 'art' to be practised by gentlemen (Lawrence, 1985: 504–18). 'Medicine' became a coherent discipline only

in the 20th century, after science itself had been redefined to exclude the cultural and moral disciplines and refer only to the experimental, laboratory sciences. Only then could various practitioner sects begin to reformulate the 'healing art' as a body of knowledge and practice based upon the new science. This alliance produced the 'new face' of medicine, which became widespread well after the First World War (Lawrence, 1985). Even as late as 1927, Bernhard Stern's (1968: 22–5) analysis on the state of medicine reports American practitioners to be 'inundated' with different theories of disease with little means of evaluating them.

In this context then, and prior to the institutionalization of biomedicine, sociology offered a continuous critique of the narrow and reductionist conceptions of human well-being which appeared throughout the 19th century, and actively resisted theories of contagionism, miasma, pathological anatomy and the new physiology: all of which, somewhat inconsistently, verged toward conceptualizing 'well-being' as merely a state of the physical body. Marx and Engels, for instance, challenged the notion of disease as a specific, physiological entity. They argued human afflictions are not the inevitable outcome of a static, unchanging nature, nor can the human body be merely a 'natural' body passively responding to a fixed physical environment (Marx and Engels, 1976: 502). Instead they problematized the relationship between humans and their environment, insisting on a dynamic, mutual shaping of material and social bodies, and the constant but historically contingent transformation of the body and human needs in the process of production (ibid.: 37, 46, 493, 502, 507, 541, 561).

Durkheim also rejected the narrow, positivist conception of disease as a physical, molecular 'fact', subject to fixed laws that humans are 'forced' to endure (1951: 114; also 1960: 367). Responding to the ideas and works of his contemporaries, including Claude Bernard the physiologist (1927[1865]) and Adolphe Quételet (astronomer, mathematician and sociologist), Durkheim pursued an alternative theorization of disease as a *social* and *collective fact*, insisting its causes, like those of suicide, cannot be found in the individual or the intrinsic nature of a person (Durkheim, 1951: 298–300, 304, 320, 323–4). Durkheim critiqued the increasingly insistent notion – initially put forward by the pathological anatomists but subsequently reformulated by the new physiologists – of disease as universal in character, recognizable as a specific disease irrespective of the particularities of its host or context, and hence statistically measurable. By way of contrast, Durkheim suggested health and disease are not absolute states of existence given in the things themselves, but relative to context and circumstance (1938: 49, 51–2, 66, 74), and produced through the conditions of collective existence (1951: 304, 320; 1938: 59–63).

In his critique of statistics and of Quételet's notion of the 'average man' (Durkheim, 1951: 300–6, 316–18; see also Parodi *et al*., 2006: 358), Durkheim proposes one cannot explain that which is rare (i.e. abnormal) from charac-

teristics found in the 'average', 'normal' individual, for they are not present (Durkheim, 1951: 303). Instead Durkheim argues causes must be sought in the collective, for 'the group formed by associated individuals has a reality of a different sort from each individual considered singly' (ibid.: 320). In other words, the whole is more than the sum of its parts (ibid.: 311; also 1960: 364; 1938: 102–3). For Durkheim, the methods of Quételet are likened to those of the clinician, and both are opposed to those of the sociologist (1951: 323–4): the clinician seeks causes within the individual patient, in isolation from others, whereas the sociologist finds the source of social phenomena in forces and tendencies 'outside' the individual. From this perspective, Durkheim theorized disease as a form of social 'deviance', a departure from established norms. In this he moved radically away from theorizing it as a physiological 'disturbance', in which the state of health is 'the perfect adaption of the organism to its environment' (Durkheim, 1938: 50). Thus Durkheim acknowledged the positive contribution of ill-health to the normal functioning of society, arguing that our collective response to disease operates to reaffirm core values and collective sentiments and to produce social solidarity (1938: 54, 72; 1951: 365). For Durkheim (1951: 391) then, ill-health and death were not marginal but central sociological concerns, for they derive their form and significance from the social milieu, and thus indicate its 'pathologies and disturbances'.

Durkheim's contemporary, Max Weber, similarly proffered critiques of specific theories of disease (e.g. 1949: 75) and therapeutic practice (e.g. 1970: 142–4; 1949: 85–6), and displayed a concern with health, disease and mortality (e.g. Weber, 1970: 139–40, 329–30, 335–40, 356). Yet his contribution to sociology and the theorizing of disease was, in one respect, more fundamental than that of Durkheim or even Marx. Of the sociological 'founders', Weber engaged most directly with the challenges posed to sociology between the late 19th century and the early decades of the 20th century by the increasingly powerful and emerging institution of medicine. Weber's work, particularly *The Methodology of the Social Sciences* (first published in 1922), but also *Science as a Vocation* (originally a speech delivered at Munich University in 1918), were engagements in prevailing intellectual debates as well as active, political responses in a context of competing knowledge-claims over the nature of well-being and the most appropriate solutions to pressing social and material problems.

The protagonist in Weber's critiques is not 'medicine' in the modern sense, for when he was writing (that is, between the last decade of the 19th century and the first two decades of the 20th century), 'medicine' was only beginning to take its recognizably modern form. Most medical schools were located outside the university system, and sought to teach the 'clinical art'. Elite practitioners who attended university found themselves in an environment where there was widespread resistance to the new laboratory and experimental

methods from the medical 'men', and hence took courses, not in the 'natural' sciences, but in what we would now term the liberal arts, where the object was to produce 'gentlemen', not scientists. It was only after Weber's death that 'medicine' finally ceased to draw on older philosophies and transformed into a discipline aligned with the experimental, 'natural' sciences. Given that 'medicine' during this period was, in many parts of Europe, still a largely fragmented set of practices and knowledges, Weber's critique of 'medicine' is, quite reasonably, rarely directed at 'medicine' as a 'whole' – for it did not have, nor could yet claim, such coherence – but aimed toward a variety of protagonists, each propounding unique definitions, constructions and solutions to prevailing human problems.

Hence it is in Weber's critique of vitalism, physiology and the new experimental sciences (including the emerging biology), that much of his challenge to 'medicine' can be located. Physiology in particular drew his attention. The 1810 reform of the German universities saw physiology located within faculties of philosophy, where the emphasis was on pure rather than applied research (Veit-Brause, 2001: 38). In this early period, physiology encompassed (what we would now regard as) the 'social' as well as 'physical' development of the human organism: a view reflected in the writings of Saint-Simon (e.g. 1975: 74–5, 97, 112–15). By the end of the 19th century, however, physiology was being claimed as a new form of knowledge, and over the next few decades was to become central to the new 'life sciences', to biology, and to the formation of a new discipline of medicine (cf. Coleman, 1985). Veit-Brause (2001) argues that the reframing of physiology was critical to modern disciplinary formation, for the new physiologists were instrumental in redefining science as a form of knowledge based on the experimental method. As such, physiology was at the heart of the transformation of the universities.

Intellectual, and very public, debates, at this time, focused on issues such as the opposition and rivalry between the natural and moral-cultural sciences, and whether they differed as a result of 'the nature of things' studied, or their methodological procedures (Helmholtz [1862: 81], cited in Veit-Brause, 2001: 39). A new generation of physiologists, including Virchow, Helmholtz and du Bois-Reymond, found themselves champions of the experimental sciences and challengers of the cultural sciences in the social context of an historically literary, humanist Germany. As public intellectuals, the physiologists and other proponents of the new experimental sciences were relative newcomers, actively seeking public and intellectual recognition in order to gain adequate funding (Veit-Brause, 2001: 38). They argued that 'proper' scientific knowledge excluded the moral sciences and metaphysics, and it was the natural sciences, with its causal explanations, which would make it possible to dominate nature and bring well-being to society (ibid.: 42–4).

The challenge to the cultural and human sciences from these attempts to prescribe their methods and theories, and the threat to render them subsidiary to the natural sciences, did not go unheeded. Max Weber and others entered

the debate, vigorously attacking the Comtean notion of a hierarchy of the sciences and the inevitable development of the human sciences (Veit-Brause, 2001: 47). Weber took particular aim at the new physiology, and the efforts of the physiologists to marginalize the cultural sciences and force the widespread adoption of their methods. Although willing to take 'physiological facts' such as nutrition into account if it could be demonstrated that they influence social behaviour (Weber, in Coser and Rosenberg, 1976[1957]: 213), he insisted that medicine, biology and physiology were flawed bodies of knowledge, which 'take out history', and focus their gaze on 'universal laws' that are not reality, but merely tools for understanding (Weber, 1949: 85–6). Thus Weber challenged the very categories of thought and analytical logic upon which the new medicine was being constructed (Collyer, 2008). Weber perceived this struggle between the sciences to be linked to the processes through which 'medicine' and the experimental sciences were effectively being positioned as the authority both to define and solve human problems, and clearly appreciated the significance of the threat from the natural sciences as a critical moment for the cultural sciences: the 'final twilight of all evaluative standpoints in all the sciences' (Weber, 1949: 86).

THE CONSTRUCTION OF BIOMEDICINE

The above brief overview of the works of some of the 'founders' of sociology reveals their interest in matters of health, disease and mortality, and thus suggests an earlier historical threshold for the sociological theorization of ill-health than generally found in the official history. Importantly, it also raises questions about how the founders' interests in health and medicine came to be widely underestimated in the recounting of sociology's early formation. The argument presented in this second half of the article is that this misreading of history can largely be explained through the analysis of the newly professionalizing discipline of sociology amid the rising dominance of biomedicine during the first half of the 20th century.

Discipline-based histories of medicine tend to explain the dominance of 20th-century biomedicine as the consequence of *internal* development. These histories argue for a steady increase in the effectiveness of the technologies of medicine throughout the 19th century, and the achievement of a theoretical coherence in its knowledge base by the end of the century (e.g. Hardy, 2001; R. Porter, 1993; Sand, 1952). In contrast, most sociological perspectives have emphasized a continuing disorder in the health sector during the 1800s (e.g. Schepers, 1985: 336; Bullough and Bullough, 1972: 97–8), and problematize the successful organization of some of the many disparate healing groups and reformers into a coherent profession. For instance, Johnson (1972) and others (Figlio, 1987; K. White, 2004; Freidson, 1970) argue that medicine underwent a process of professionalization, enabling it to succeed in the *political* arena

as it aligned its interests with those of the state or ruling class. Sturdy and Cooter (1998), and J. Warner (1992), propose biomedicine formed as a modern discipline and viable institution from about 1930 – with some national variation – when some of the disparate sects and groups were successful in claiming a new capacity to manage ill-health, but also the possession of the necessary expert, technical and theoretical knowledge – and a form of investigative methodology – to order, organize and administer industrial society as a whole (Sturdy and Cooter, 1998: 423, 448).

There had, of course, been many previous efforts at reforming the knowledge and practices of healing throughout the 19th century. Across Europe, Britain and America, many individuals and groups worked to introduce various approaches and theories; for instance, the statistical methods of Adolphe Quételet (cf. Parodi *et al*., 2006: 358–9), the principles of pathological anatomy (Foucault, 1980; Lawrence, 1994), theories of contagionism (Ackerknecht, 1948), the experimental, laboratory sciences (as propounded by Louis Pasteur, Robert Koch and others, see Gelfand, 2002; Klöppel, 2008), Rudolf Virchow's social and political medicine (Viner, 1998) as well as his cellular theories of disease (Barberis, 2003: 64), and even the physiology of Claude Bernard (Coleman, 1985). It was not, however, until the 20th century that some of the disparate groups were successful in putting forward a new definition of health based in the new biological sciences, and able to utilize the sciences as a basis for a new 'medical' identity and practice. In this new context, proponents were able to claim sole expertise in matters concerned with health and disease, and the boundaries were redrawn between the 'quacks' and 'legitimate' practitioners.

Sociologically, biomedicine can be seen as the product of a new alignment between the experimental sciences, *some* of the healing sects, various medical and social reformers, the state and industry. It was not an internal development, but occurred in tandem with many other social changes. These included a lessening of the disunity and flux within the sciences, and a new definition of science *as* the experimental, laboratory method (cf. Ilerbaig, 1999; J. Warner, 1995). Also important was the political context in Britain and the European countries at the turn of the century, where there was considerable public concern over the high rates of infant mortality and the class and race differentials in birth rates (Moscucci, 2005: 1317). The near defeat of the British in the Boer War added to a sense of national decline and the need for social reform (ibid.: 1318). Specific groups were putting forward the view that military might and industrial production were dependent on a healthy population, and, very strategically, the new physiologists, as early as 1921, began to equate 'industrial efficiency with health and illness' (Sturdy and Cooter, 1998: 447–8; J. Warner, 1992). Moreover, claims were made that the new laboratory and experimental sciences could best further the goals of the state and the corporate sector, and effectively manage the social and physiological

body through a specialized, politically and morally neutral, and hierarchically organized, array of technical experts. Sociology also put forward its claims for a capacity to manage well-being and social order, but its critique of elite and ruling class discourses, and its broad – and radical – understanding of health did not result in legitimacy. Instead, the diversity of public and scholarly perspectives on health and disease gave way to the hegemony of a medical model wherein well-being was reduced to a state of the individual physiological body, and which, by definition, excluded the collective, moral and political dimensions as causal factors in disease. As a consequence of these widespread and significant social changes, the new biomedicine, along with the laboratory and experimental sciences, began to attract massive funding for research, teaching and hospitals from governments, philanthropists, and the corporate sector in Europe, Britain (Moscucci, 2005: 1318) and America (Bloom, 2002).

With investment on this scale, the disciplines and institutions of biomedicine and the experimental sciences grew rapidly over the first half of the 20th century. Resistance to 'scientific' medicine was eventually reduced and medical teaching broadly standardized by the end of the Second World War. And, as will be argued in the section below, the construction of this new biomedicine was a significant factor in the transformation of the discipline of sociology and its specialities.

MEDICALIZATION AND THE NEW SOCIOLOGICAL PROJECT

The redrafting of the *sociological project* from the 1930s thus occurred within an historically unique context. While sociologists of the 19th century and the classical period participated in the articulation of diverse discourses about the nature of disease, subsequent generations of sociologists were faced with a single and dominant model, biomedicine. The decades between the 1930s and 1950s were the 'golden age' of biomedicine. Medical authority and control extended throughout political, moral and cultural domains, and medicine was well resourced by both the state and the corporate sector. Medicalization was also at its peak during this period, as increasing forms of 'undesirable' conduct were viewed as amenable to medical explanation and intervention. Thus, as new generations of sociologists participated in the construction, transmission or legitimation of the sociological 'canon', they not only redefined sociology as fundamentally concerned with the social problems of the metropole (Connell, 1997: 1535), the 'communicating self' (Alexander, 1997: v–vi), and the group (Small, 1924: 26, 337), but significantly 'reframed' these concepts within a new social reality dominated by biomedicine and an increasingly pervasive medicalization of everyday life.

This becomes readily apparent in the different sociological approaches to ill-health after 1930. As we have seen, one of the concerns of sociology in the 19th and early 20th centuries had been the afflictions and sufferings of individuals and groups. In the founders' texts, physical infirmities, insecurity of housing, lack of income, exploitation, violence and alcohol abuse, are regarded within a broad definition of ill-health or, to use a modern term, as indications of a lack of well-being. While theories of causation and aetiology varied, it was taken for granted that there was a mutually constitutive relationship between physical infirmities and other forms of moral or social suffering (Saint-Simon, 1975: 273; Marx and Engels, 1976: 502, 507; Durkheim, 1951: 365; 1938: 59–63; Mill, 1962: 266). Over subsequent decades however, the broader approach to health as 'well-being' is increasingly replaced in sociology by the adoption of a narrow, and reductionist, understanding. Largely ignoring earlier sociological critiques of biologism, vitalism, pathological anatomy and the new physiology, new generations of sociologists uncritically incorporated the notion of 'disease' as an established biological, physiological 'fact'. And increasingly, ill-health disappeared as a legitimate concern of sociology. Sociologists came to regard both the management and theorization of disease as the responsibility of the *medical* expert.

In 1927, for example, sociologist Bernhard Stern, while acknowledging the continuing theoretical disputes among practitioners over the causation of disease (Stern, 1968: 21–5), nevertheless adopts these new 'biological' definitions. For Stern (ibid.: 22, 100), health is a state achieved when a human body is capable of regenerating its tissues, and disease is the product of pathogenic micro-organisms. Similarly, Kingsley Davis, in 1940, in offering a theory of parent–youth conflict, appears not to regard as problematic the assigning of sexual and other bodily 'needs' to 'organic' processes (1980[1940]: 355, 357, 367). For Davis, these belong to a 'realm' determined by inevitable and 'inescapable' laws, quite unlike the more 'fluid' social realm of morality. As a consequence, he suggests, the former arena is more competently studied by *other* specialists, not sociologists (ibid.: 364).

By mid-century, sociologists are increasingly adamant that physical illness is not a social but a medical problem, that the causal mechanisms of disease have been 'discovered', and that the study and treatment of disease are appropriately the responsibility of medicine (e.g. Sorokin, 1949: 25; Reader and Goss, 1959; Clausen, 1959, 1971[1961]: 29; Ogburn and Nimkoff, 1964 [1947]: 273). A classic example of this position is found in the sociology of Talcott Parsons (1951), who offered a definition of health and disease, which, on one hand, radically departed from that of medicine, on the other, endorsed medicine's authority. For Parsons, illness is in part 'organic' or 'biological', and in part 'social'; for while 'sickness' is an adopted social role, disease is fundamentally a physiological 'fact' (1968[1937]: 372; 1951; 1978: 69–70). With this dualistic theory of ill-health, offered as it was by a figure of considerable

authority, sociology's own role was clarified. While it may examine how social facts (such as norms and roles) might contribute to (i.e. influence the severity or distribution of) ill-health, it does not have a role in studying disease per se. This is because the embodied, suffering individual is the province of more powerful disciplines, namely medicine, the new life sciences, and biology.

The changing conception of disease and its removal from legitimate sociological inquiry occurred in conjunction with a shift in the definition of sociology itself. In the context of widening differentiation between fields of expertise and the imperatives of professionalization for all disciplines, some leading sociologists sought to free the discipline from its previous orientation toward the study of physical, psychological *and* social phenomena. This 19th-century position continued to be expressed in the early decades of the 20th century, by, for instance, Albion Small (1923: 21, 404), who argued sociology could advance only upon a foundation of knowledge about the physical and psychical basis of social behaviour. As a model for sociology, it continued to appear in texts of the 1930s and 1940s. This can be seen, for instance, in Karl Mannheim's [1947] preface to the first edition of *A Handbook of Sociology*, where he points to authors as sociologists who are still convinced of the need to see social life as 'the interaction of four factors: the biological organism, geographical environment, group processes, and cultural heritage' (Ogburn and Nimkoff, 1964[1947]). A glance at other texts, however, shows a growing assertiveness about the viability of a sociology confined to an examination of 'the social' (e.g. Wilson and Kolb, 1949: 59). Equally, it becomes increasingly *illegitimate* in sociology to take into account other disciplinary perspectives in causal explanations. Indeed, by 1965, Parsons and his colleagues (1965a: xxiii) declare biology, psychology and theories of culture to be outside a theory of social systems.

This rather decisive removal of 'non-social' phenomena from sociological inquiry occurred through a process of systematic critique, and, at times, personal denigration of 'offenders'. For example, Leslie White, commenting on his mentor Henry Morgan's 1877 theory of evolution, states: 'Morgan *failed to see* that kinship in human society is primarily and essentially a social phenomenon and only secondarily and incidentally a biological matter' (White, 1948: 144; emphasis added). For Morgan, 'biological' aspects were not reducible to the 'social', but merely a less interesting part of any analysis. For White, however, in a very different intellectual and institutional context, *sociological* analysis is, by definition, *socially* reductionist. Just as biomedicine had been claiming a new knowledge of disease through the exclusion of the social dimensions of experience, sociologists were required to offer a unique body of knowledge about the problems of the human condition without reference to 'the biological' body. As Naegele (1965b: 148) confidently asserted a few years later, 'the "social" stands for those spheres of human life which are neither biological nor . . . "legal", "political", "economic", or "psychological"'.

This reframing of sociology as the science of 'the social' as opposed to the 'biological' or 'natural', had a profound impact. Although earlier sociologists had integrated ill-health within their models of society, after the 1930s it disappeared from view. By this time the dominant discourse was fundamentally biomedical, the focus of sociological inquiry had become the small group, norms, values and social interaction, and 'the social' had been defined by authoritative sociological voices as that which was decidedly neither biological nor medical. As a consequence, sociologists had little choice but to consider ill-health within a rather limited framework. Thus texts produced around mid-century commonly presumed ill-health to be influenced (but not caused) by the individual's poor adjustment and lack of adaptability to 'social norms'. Sociologists took the 'problem' of ill-health to be biological and inevitable, but argued for its distribution (that is, its frequency and severity) as socially patterned due to the consequences of 'lifestyle choices', habitual behaviour and individual or group inadequacies (e.g. Clausen, 1959: 487; Faris and Dunham, 1949; Ogburn and Nimkoff, 1964: 351). Sociology's role, with regard to ill-health, was limited to the description and measurement of the newly revealed 'maladjusted' social type with its greater risk of disease.

THE CREATION OF SPECIALITIES

In reflecting on the sociology of the 1920s, Edward Shils (1965: 1406) described it as an immature field in 'disarray'. By mid-century, sociology had gathered a new set of principles to define its intellectual and professional boundaries, and was declared to have a 'unified theoretical orientation' (ibid.: 1405). The question of *how* this apparent 'unification' was achieved has yet to be adequately addressed. Parsons (1965a: 33) saw it as the result of a consensus 'regarding the relevance of the classical canons of scientific method'. In Connell's (1997) analysis, the transformation of sociology occurred through canonization and the imposition of a new and highly selective viewpoint by a handful of powerful, and uniquely placed, individuals. Parsons's account can be seen today as somewhat limited and parochial, ignoring the political and institutional factors shaping a discipline. Connell's thesis, which promises an institutional and political history, offers something closer to a conspiracy theory. Neither analysis gives sufficient attention to the structural and institutional impacts of medicalization. Yet these effects can be readily discerned within the undergraduate texts of the era: a new phenomenon from the late 1930s. As a genre, the student text played a critical part in inculcating students into the discipline and promoting sociology as a profession. However, these texts also promulgated a particular perspective about the nature of contemporary sociological knowledge and how the discipline came to have its characteristic features. It needs to be stated that these texts were generally not

intended as histories. Indeed many of their introductory pages contained explicit statements about how these were analyses of the writings of past sociologists and not *histories* of either sociological theory or the discipline (e.g. Merton, 1968[1949]: 1–2; Naegele, 1965a: 4, 21; Parsons, 1965b: 85). Clearly, their authors were not unaware of the difference between a history of ideas, an intellectual history, and a history of the development of the discipline (e.g. Merton, 1968[1949]: 35; Wolff, 1959; R. S. Warner, 1976: 4–5). Nevertheless, these texts have *functioned* as disciplinary histories, imposing, and sanctioning, a specific orientation toward the production of sociological knowledge.

This orientation is particularly evident in the construction of the notion of a sociological 'core'. Between the 1930s and 1950s, as the number of sociologists and sociology departments increased, so did their range of interests, with some focusing on particular dimensions of social life, such as the urban or rural sectors or problems of methodology or theory. The popularity of these interests varied, but their proliferation produced concern within the sociological community and represented a challenge to the still fragile unity of the sociological project (cf. Shils, 1965: 1406; Naegele, 1965a: 24). The potential for disruption was resolved, however, through the designation of some forms of sociological investigation as 'specialities', and others as *integral* to a sociological 'core'. Texts of the period are littered with assertions about this distinction. 'Core' concerns of sociology are said to be the result of 'timeless', 'universal' and 'enduring' human concerns (Naegele, 1965a: 26: Parsons, 1965a: 31; Shils, 1965: 1412), to have continuing validity, viability and relevance (R. S. Warner, 1976: 11; Nisbet, 1967: 7, 318), and to remain problematic and insolvable (Shils, 1965: 1447). The 'problems' investigated within the specialities, on the contrary, are the product of the *new* social concerns of the 20th-century urban context (Merton *et al*., 1959: xxxiii; Simpson and Yinger, 1959: 399). Moreover, while the specialities may be useful for demonstrating the application of core sociological theories, they are *not of sociological interest in themselves* (Reader and Goss, 1959: 232; Merton, 1971[1961]: 802). Such pronouncements placed the specialities as peripheral to sociology itself, for it was argued the phenomenon they studied was not, by definition, to be found in any systematic form within the classic, canonical texts, and hence each of them must have *its own history* (Merton, 1959: xxx, xxxiii), and likewise *its own* precursors and founders (Lipset, 1959; Barber, 1959).

This version of the discipline, which justified the present in terms of a very selective view of past events, completely ignored the political and institutional context in which sociologists were working. And the consequences for medical sociology, and the other 'specialities', were profound. Each developed a unique origin myth and took its place within a newly created hierarchy of sociological knowledge. This hierarchical arrangement offered rewards for those placed in the 'core' (i.e. the study of the classics), but for practitioners

working within the 'subfields', prestige became increasingly allusive, and their contributions often overlooked.

CONCLUDING REMARKS

The above discussion has argued for an earlier historical threshold for the sociological theorizing of health, disease and mortality, than that found in the official record. It has been revealed that the 'classical founders' were interested in matters of health, disease and mortality, took an active part in debating theories of causation, were not marginalized in these debates, and offered enduring and useful theoretical frameworks. It is further suggested that these early theories of health, disease and mortality were discounted and overlooked in the reframing of the sociological project after the 1920s when sociologists ceded ground to the authority of the new experimental sciences and biomedicine. This occurred as a consequence neither of a sociological consensus, nor of a political or professional conspiracy. Instead the new conceptual frameworks of biomedicine became the lens through which sociologists, writing in the new genre of the student text, came to select appropriate 'founders' and 'classic works' for the discipline, define the 'essence' of sociology and its landscape, and offer an interpretation of the past. This new evidence indicates a need for future scholars to 'correct' the official disciplinary history by acknowledging and including the classical founders' much earlier theories of health, disease and mortality in the disciplinary history and student texts.

A second, but related, conclusion of this article is the extent to which the history of sociology as a discipline has been shaped by the institutions of biomedicine and the experimental sciences. While *biomedicine* cannot be said to be a *parent* discipline, sociologists involved in the creation of the sociological project in the mid-20th century were nevertheless forced to accept the newly reformulated conceptions of health and disease, and reorder their knowledge base to avoid conflict and inter-disciplinary rivalry. One of the previously unacknowledged consequences of efforts to side-step this potential conflict was the separation of theories of health, disease and mortality from the mainstream of sociology, and the emergence of distinct origin myths for each subfield. Further research is required to investigate whether the hierarchical order of the discipline, as it was constructed at mid-century, has been maintained, and the extent to which the discipline has continued to shift in response to changes within biomedicine and the experimental sciences.

BIBLIOGRAPHY

Ackerknecht, E. (1948) 'Anticontagionism between 1821 and 1867', *Bulletin of the History of Medicine* 20: 562–93.

Albrecht, G. (1979) 'Social Aspects of Medical Care', in G. Albrecht and P. Higgins (eds) *Health, Illness, and Medicine*. Boston, MA: Houghton Mifflin, pp. 1–14.

Alexander, J. (1997) 'General Introduction', in J. Alexander, R. Boudon and M. Cherkaoui (eds) *The Classical Tradition in Sociology: The American Tradition*, vol. 1. London: Sage, pp. i–xv.

Armstrong, D. (2000) 'Social Theorising about Health and Illness', in G. Albrecht, R. Fitzpatrick and S. Scrimshaw (eds) *The Handbook of Social Studies in Health and Medicine*. London: Sage, pp. 24–35.

Badgley, R. and Bloom, S. (1973) 'Behavioural Sciences and Medical Education', *Social Science and Medicine* 7: 927–41.

Barber, B. (1959) 'The Sociology of Science', in R. Merton, L. Broom and L. Cottrell (eds) *Sociology Today*. New York: Basic Books, pp. 215–28.

Barberis, D. (2003) 'In Search of an Object: Organicist Sociology and the Reality of Society in *fin-de-siècle* France', *History of the Human Sciences* 16(3): 51–72.

Bernard, C. (1927[1865]) *An Introduction to the Study of Medicine*, intro. L. J. Henderson. New York: Macmillan.

Bloom, S. (2002) *The Word as Scalpel*. New York: Oxford University Press.

Bullough, B. and Bullough, V. (1972) 'A Brief History of Medical Practice', in E. Freidson and J. Lorber (eds) *Medical Men and Their Work*. Chicago, IL: Aldine-Atherton, pp. 86–102.

Bulmer, M. (1997) 'The Chicago School of Sociology: What Made It a "School"?', in J. Alexander, R. Boudon and M. Cherkaoui (eds) *The Classical Tradition in Sociology: The American Tradition*, vol. 1. London: Sage, pp. 168–82.

Camic, C. (1995) 'Three Departments in Search of a Discipline', *Social Research* 62(4): 1003–33.

Camic, C. and Gross, N. (1998) 'Contemporary Developments in Sociological Theory', *Annual Review of Sociology* 24: 453–76.

Claus, L. (1983) 'The Development of Medical Sociology in Europe', *Social Science and Medicine* 17(1): 591–7.

Clausen, J. (1959) 'The Sociology of Mental Illness', in R. Merton, L. Broom and L. Cottrell (eds) *Sociology Today*. New York: Basic Books, pp. 485–508.

Clausen, J. (1971[1961]) 'Mental Disorders', in R. Merton and R. Nisbet (eds) *Contemporary Social Problems*. New York: Harcourt Brace Jovanovich, pp. 29–87.

Cockerham, W. (1983) 'The State of Medical Sociology in the United States, Great Britain, West Germany and Austria: Applied vs Pure Theory', *Social Science and Medicine* 17(20): 1513–27.

Cockerham, W. (2005) 'Medical Sociology and Sociological Theory', in W. Cockerham (ed.) *The Blackwell Companion to Medical Sociology*. Victoria: Blackwell, pp. 3–22.

Coleman, W. (1985) 'The Cognitive Basis of the Discipline: Claude Bernard on Physiology', *Isis* 76: 49–70.

Collins, R. (1985) *Three Sociological Traditions*. New York: Oxford University Press.

Collyer, F. M. (2008) 'Max Weber, Historiography, Medical Knowledge, and the Formation of Medicine', *Electronic Journal of Sociology*, available at: http://www.sociology.org/contents.html

Connell, R. (1997) 'Why is Classical Theory Classical?', *The American Journal of Sociology* 102(6): 1511–57.

Connell, R. (2005) 'Australia and World Sociology', in J. Germov and T. McGee (eds) *Histories of Australian Sociology*. Carlton: Melbourne University Press, pp. 3–27.

Connell, R. and Wood, J. (2002) 'Globalisation and Scientific Labour', *Journal of Sociology* 38(2): 167–90.

Conrad, C. (2004) 'Social History', in *International Encyclopedia of the Social and Behavioral Sciences*. Amsterdam and Oxford: Elsevier, pp. 14299–306.

Coser, L. and Rosenberg, B., eds (1976[1957]) *Sociological Theory*. London: Collier Macmillan.

Davis, K. (1980[1940]) 'The Sociology of the Parent–Youth Conflict', in L. Coser (ed.) *The Pleasures of Sociology*. New York: Mentor Books, pp. 353–69.

Durkheim, É. (1938[1895]) *Rules of Sociological Method*. New York: Free Press.

Durkheim, É. (1951[1897]) *Suicide: A Study in Sociology*. New York: Free Press.

Durkheim, É. (1960[1900]) 'Sociology and its Scientific Field', in K. Wolff (ed.) *Essays on Sociology and Philosophy*. New York: Harper & Row, pp. 354–75.

Eichler, M. (2001) 'Women Pioneers in Canadian Sociology: The Effects of a Politics of Gender and a Politics of Knowledge', *Canadian Journal of Sociology* 26(3): 375–403.

Eisenstadt, S. and Curelaru, M. (1976) *The Form of Sociology – Paradigms and Crises*. New York: John Wiley & Sons.

Engels, F. (1969[1845]) *The Condition of the Working Class in England*. London: Panther Books.

Faris, R. and Dunham, W. (1949) 'The Concentration of the Alcoholic Psychoses and Drug Addicts in the Zone of Transition', in L. Wilson and W. Kolb (eds) *Sociological Analysis*. New York: Harcourt, Brace & World, pp. 252–60.

Figlio, K. (1987) 'The Lost Subject of Medical Sociology', in G. Scambler (ed.) *Sociological Theory and Medical Sociology*. London: Tavistock, pp. 77–109.

Foucault, M. (1980) 'The Politics of Health in the Eighteenth Century', in C. Gordon (ed.) *Power/Knowledge*. Brighton, Sx: Harvester.

Freidson, E. (1970) *Professional Dominance*. New York: Aldine.

Gallagher, E., Stewart, T. and Stratton, T. (2000) 'The Sociology of Health in Developing Countries', in C. Bird, P. Conrad and A. Fremont (eds) *Handbook of Medical Sociology*. Upper Saddle River, NJ: Prentice Hall, pp. 389–97.

Gelfand, T. (2002) '11 January 1887, the Day Medicine changed: Joseph Grancher's Defense of Pasteur's Treatment for Rabies', *Bulletin of the History of Medicine* 76: 698–718.

Gerhardt, U. (1989) *Ideas About Illness*. London: Macmillan.

Germov, J., ed. (2005) *Second Opinion*. South Melbourne: Oxford University Press.

Germov, J. and McGee, T., eds (2005) *Histories of Australian Sociology*. Carlton: Melbourne University Press.

Goldman, L. (1986) 'The Social Science Association, 1857–1886', *English Historical Review* C1(433): 95–134.

Grbich, C., ed. (2004) *Health in Australia*. Frenchs Forest, NSW: Pearson Longman.

Hardy, A. (2001) *Health and Medicine in Britain since 1860*. Basingstoke, Hants: Palgrave.
Holton, R. J. (1996) 'Classical Social Theory', in B. S. Turner (ed.) *The Blackwell Companion to Social Theory*. Oxford: Blackwell, pp. 25–52.
Idler, E. (1979) 'Definitions of Health and Illness and Medical Sociology', *Social Science and Medicine* 13A: 723–31.
Idler, E. (2001) 'Religion, Health, and Nonphysical Senses of Self', in W. Cockerham and M. Glasser (eds) *Readings in Medical Sociology*. Upper Saddle River, NJ: Prentice Hall, pp. 171–87.
Ilerbaig, J. (1999) 'Allied Sciences and Fundamental Problems: C. C. Adams and the Search for Method in Early American Ecology', *Journal of the History of Biology* 32: 439–69.
Jefferys, M. (2001) 'The Development of Medical Sociology in Theory and Practice in Western Europe 1950–1990', in D. Matcha (ed.) *Readings in Medical Sociology*. Boston, MA: Allyn & Bacon, pp. 14–19.
Johnson, T. (1972) *Professions and Power*. London: Macmillan Press.
Klöppel, U. (2008) 'Enacting Cultural Boundaries in French and German Diphtheria Serum Research', *Science in Context* 21: 161–80.
Langer, J. (1992) 'Emergence of Sociology', in J. Langer (ed.) *Emerging Sociology*. Aldershot, Hants: Avebury, pp. 1–18.
Lawrence, C. (1985) 'Incommunicable Knowledge', *Journal of Contemporary History* 20: 503–20.
Lawrence, C. (1994) *Medicine in the Making of Modern Britain, 1700–1920*. New York: Routledge.
Lipset, S. (1959) 'Political Sociology', in R. Merton, L. Broom and L. Cottrell (eds) *Sociology Today*. New York: Basic Books, pp. 81–114.
McDonald, L. (1994) *Women Founders of the Social Sciences*. Ottawa: Carleton University Press.
McLaughlin, N. (1999) 'Origin Myths in the Social Sciences: Fromm, the Frankfurt School and the Emergence of Critical Theory', *Canadian Journal of Sociology* 24(1): 109–39.
Manier, E. (1980) 'History, Philosophy and Sociology of Biology: a Family Romance', *Studies in the History and Philosophy of Science* 11(1): 1–24.
Marks, H. (2006) 'Until the Sun of Science . . . the True Apollo of Medicine has risen', *Medical History* 50: 147–66.
Marx, K. (1964[1844]) *Economic and Philosophical Manuscripts of 1844*. New York: International Publishers.
Marx, K. and Engels, F. (1976[1845–6]) *The German Ideology*. Moscow: Progress Publishers.
Mechanic, D. (1978[1968]) *Medical Sociology*. New York: Free Press.
Merton, R. (1959) 'Introduction', in R. Merton, L. Broom and L. Cottrell (eds) *Sociology Today*. New York: Basic Books, pp. ix–xxxiv.
Merton, R. (1968[1949]) *Social Theory and Social Structure*. New York: Free Fress.
Merton, R. (1971[1961]) 'Social Problems and Sociological Theory', in R. Merton and R. Nisbet (eds) *Contemporary Social Problems*. New York: Harcourt Brace Jovanovich, pp. 793–845.
Merton, R., Broom, L. and Cottrell, L. (1959) *Sociology Today*. New York: Basic Books.

Mill, J. S. (1941[1884]) *A System of Logic Ratiocinative and Inductive*. London: Longmans Green.

Mill, J. S. (1962[1859]) *Utilitarianism. On Liberty. Essay on Bentham*. London: Fontana.

Moscucci, O. (2005) 'Gender and Cancer in Britain, 1860–1910', *American Journal of Public Health* 95(8): 1312–21.

Naegele, K. (1965a) 'Some Observations on the Scope of Sociological Analysis', in T. Parsons, E. Shils, K. Naegele and J. Pitts (eds) *Theories of Society*, combined vols. New York: Free Press, pp. 3–29.

Naegele, K. (1965b) 'Editorial Foreword. Interaction: Roles and Collectivities', in T. Parsons, E. Shils, K. Naegele and J. Pitts (eds) *Theories of Society*, combined vols. New York: Free Press, pp. 147–57.

Nisbet, R. (1967[1966]) *The Sociological Tradition*. London: Heinemann.

Ogburn, W. and Nimkoff, M. (1964[1947]) *A Handbook of Sociology*. London: Routledge & Kegan Paul.

Orfali, K. (2005) 'The French Paradoxes', in W. Cockerham (ed.) *The Blackwell Companion to Medical Sociology*. Victoria: Blackwell, pp. 263–87.

Parodi, A., Neasham, D. and Vineis, P. (2006) 'Environment, Population, and Biology: a Short History of Modern Epidemiology', *Perspectives in Biology and Medicine* 49(3): 357–8.

Parsons, T. (1951) *The Social System*. Glencoe, IL: Free Press.

Parsons, T. (1965a) 'An Outline of the Social System', in T. Parsons, E. Shils, K. Naegele and J. Pitts (eds) *Theories of Society*. New York: Free Press, pp. 30–79.

Parsons, T. (1965b) 'Editorial Foreword: The General Interpretation of Action', in T. Parsons, E. Shils, K. Naegele and J. Pitts (eds) *Theories of Society*. New York: Free Press, pp. 85–97.

Parsons, T. (1968[1937]) *The Structure of Social Action*, vol. one, *Marshall, Pareto, Durkheim*. New York: Free Press.

Parsons, T. (1978) *Action Theory and the Human Condition*. New York: Free Press.

Parsons, T., Shils, E., Naegele, K. and Pitts, J., eds (1965) *Theories of Society*. New York: Free Press.

Patterson, J. (1998) 'How Do We Write the History of Disease?', *Health and History* 1(1): 5–29.

Petersdorf, R. and Feinstein, A. (1980) 'An Informal Appraisal of the Current Status of "Medical Sociology"', in L. Eisenberg and A. Kleinman (eds) *The Relevance of Social Science for Medicine*. Dordrecht: Reidel, pp. 27–48.

Platt, J. (1983) 'The Development of the "Participant Observation" Method in Sociology: Origin Myth and History', *Journal of the History of the Behavioral Sciences* 19 (Oct.): 379–96.

Platt, J. (1985) 'Weber's *Verstehen* and the History of Qualitative Research: The Missing Link', *The British Journal of Sociology* 36(3): 448–66.

Porter, D. (1997) 'Introduction', in D. Porter (ed.) *Social Medicine and Medical Sociology in the Twentieth Century*. Amsterdam: Rodopi, pp. 1–31.

Porter, R. (1993) *Disease, Medicine and Society in England, 1550–1860*. London: Macmillan.

Quah, S. (2005) 'Health and Culture', in W. Cockerham (ed.) *The Blackwell Companion to Medical Sociology*. Victoria: Blackwell, pp. 23–42.

Reader, G. and Goss, M. (1959) 'The Sociology of Medicine', in R. Merton, L. Broom and L. Cottrell (eds) *Sociology Today*. New York: Basic Books, pp. 229–46.
Robertson, I. (1987) *Sociology*. New York: Worth.
Saint-Simon, C.-H., comte de (1975) *Henri Saint-Simon (1760–1825)*. New York: Holmes & Meier.
Sand, R. (1952) *The Advance to Social Medicine*. London: Staples Press.
Scambler, G. (1987) 'Introduction', in G. Scambler (ed.) *Sociological Theory and Medical Sociology*. London: Tavistock, pp. 1–8.
Schepers, R. (1985) 'The Legal and Institutional Development of the Belgian Medical Profession in the Nineteenth Century', *Sociology of Health and Illness* 7(3): 314–41.
Seidman, S. (1985) 'The Historicist Controversy', *Sociological Theory* 3(1): 13–16.
Shilling, C. (1993) *The Body and Social Theory*. London: Sage.
Shils, E. (1965) 'The Calling of Sociology', in T. Parsons, E. Shils, K. Naegele and J. Pitts (eds) *Theories of Society*. New York: Free Press, pp. 1405–48.
Simpson, G. and Yinger, J. (1959) 'The Sociology of Race and Ethnic Relations', in R. Merton, L. Broom and L. Cottrell (eds) *Sociology Today*. New York: Basic Books, pp. 376–99.
Small, A. (1923) 'Some Contributions to the History of Sociology', *The American Journal of Sociology* 28(4): 385–418.
Small, A. (1924) *Origins of Sociology*. Chicago, IL: University of Chicago Press.
Sorokin, P. (1949) 'Sociology among the Social Sciences', in L. Wilson and W. Kolb (eds) *Sociological Analysis*. New York: Harcourt, Brace & World, pp. 16–30.
Stafford, W. (1994) 'Ferdinand Tönnies: a Candidate for the Canon?', *Politics* 14(1): 15–20.
Stern, B. (1968[1927]) *Social Factors in Medical Progress*. New York: AMS.
Sturdy, S. and Cooter, R. (1998) 'Science, Scientific Management, and the Transformation of Medicine in Britain *c.*1870–1950', *History of Science* 36: 421–66.
Susser, M. and Watson, W. (1971) *Sociology in Medicine*. London: Oxford University Press.
Szacki, J. (1982) 'The History of Sociology and Substantive Sociological Theories', in T. Bottomore, S. Nowak and M. Sokolowska (eds) *Sociology*. London: Sage, pp. 359–74.
Turner, B. (1987) *Medical Power and Social Knowledge*. London: Sage.
Turner, B. (1991) 'Recent Developments in the Theory of the Body', in M. Featherstone, M. Hepworth and B. Turner (eds) *The Body*. London: Sage.
Turner, B., ed. (1996) *The Blackwell Companion to Social Theory*. Oxford: Blackwell.
Veit-Brause, I. (2001) 'Scientists and the Cultural Politics of Academic Disciplines in Late 19th-century Germany', *History of the Human Sciences* 14(4): 31–56.
Viner, R. (1998) 'Abraham Jacobi and German Medical Radicalism in Antebellum New York', *Bulletin of the History of Medicine* 72(3): 434–63.
Wallerstein, I. (1999) 'The Heritage of Sociology', *Sociologicky Casopis* 35(1): 3–15.
Wardell, M. and Turner, S. (1986) 'Introduction', in M. Wardell and S. Turner (eds) *Sociological Theory in Transition*. Boston, MA: Allen & Unwin, pp. 11–18.
Warner, J. (1992) 'The Fall and Rise of Professional Mystery', in A. Cunningham and P. Williams (eds) *The Laboratory Revolution in Medicine*. Cambridge: Cambridge University Press, pp. 110–41.

Warner, J. (1995) 'The History of Science and the Sciences of Medicine', *Osiris* 10: 164–93.
Warner, R. S. (1976) 'Sociological Theory in Historical Context', in N. Smelser and R. S. Warner (eds) *Sociological Theory: Historical and Formal General*. Morristown, NJ: Learning Press, pp. 3–133.
Weber, M. (1949[1922]) *The Methodology of the Social Sciences*. New York: Free Press.
Weber, M. (1970)[1922] 'Science as a Vocation', in H. Gerth and C. Mills (eds) *From Max Weber*. London: Routledge & Kegan Paul, pp. 129–56.
White, K. (2004) 'The Social Origins of Illness and the Development of the Sociology of Health', in C. Grbich (ed.) *Health in Australia*. Frenchs Forest, NSW: Pearson Longman, pp. 28–45.
White, L. (1948) 'Lewis Henry Morgan', in H. Barnes (ed.) *An Introduction to the History of Sociology*. Chicago, IL: University of Chicago Press, pp. 138–54.
Williams, G. (2003) 'The Determinants of Health: Structure, Context and Agency', *Sociology of Health & Illness* 25 (silver anniversary issue): 131–54.
Wilson, L. and Kolb, W. (1949) *Sociological Analysis*. New York: Harcourt, Brace & World.
Wolff, K. (1959) 'Sociology and History', *The American Journal of Sociology* 65(1): 32–8.
Wright, E. (2002) 'The Sociological Significance of the Atlanta Sociological Laboratory, 1896–1924: an Argument for the Inclusion of Atlanta University and W. E. B. du Bois in the Sociological Canon', paper presented to the Southern Sociological Society, Baltimore, MD (April).
Zagorin, P. (1999) 'History, the Referent, and Narrative', *History and Theory* 38(1): 1–24.

BIOGRAPHICAL NOTES

FRAN COLLYER is the editor of *Health Sociology Review*, an international journal of the Australian Sociological Association, and a sociologist at the University of Sydney. She has published widely in medical sociology, the privatization of hospitals and health services, science and technology, and the sociology of knowledge.

Address: Department of Sociology and Social Policy, University of Sydney, RC Mills, A26, NSW 2006, Australia. Tel.: +612 9351 2653.
[email: Fran.Collyer@sydney.edu.au]